

REMARKS/ARGUMENTS

Claims 1-27 remain pending in the application. Applicant, by this paper, amends claim 1 and requests reconsideration and allowance of all pending claims.

Discussion of Rejections Under 35 U.S.C. §103

Claims 1-3, 5, 9, 13-16, 19-20, 24 and 26-27 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,643,521 to Bourgoin et al. (hereinafter Bourgoin) in view of U.S. Patent No. 5,873,040 to Dunn et al. (hereinafter Dunn). Claim 4 was rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Bourgoin in view of Dunn and U.S. Patent Application Publication No. U.S. 2002/0039905 to Remy (hereinafter Remy). Claims 6-8, 10-12, 17-18, 21-23, and 25 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Bourgoin in view of Dunn and U.S. Patent No. 6,920,329 to Kennedy, Jr. et al. (hereinafter Kennedy).

The Examiner argues that the combination of references teaches or suggests every claimed feature. However, Applicant respectfully contends that the references, whether alone or in combination, fails to teach or suggest at least one feature from each of the claims. Thus, the Examiner fails to establish a *prima facie* case of obviousness.

Claim 1 recites a method for identifying transmitters. The method, as amended, includes the feature “obtaining a plurality of received signals for a plurality of transmitters, wherein the plurality of received signals are received by a user terminal.” The method also includes the feature “determining a list of a plurality of candidate transmitters for the received signal.” Applicant amends claim 1 to expressly include that the list of candidate transmitters include a list of a *plurality* of candidate transmitters. Bourgoin and Dunn, whether alone or in combination, fail to teach or suggest this combination of claimed features.

The Examiner contends that Bourgoin teaches and suggests the claimed features identified above. The Examiner states: “Bourgoin teaches determining candidate transmitter for each transmitter.” *Office Action*, dated October 29, 2007, at page 2, (*citing Bourgoin*, at Col. 3, ll. 30-31 and 35-38). However, Bourgoin does not teach or suggest a plurality of received signals that are received by a user terminal, nor does Bourgoin teach or suggest determining a list of a *plurality of candidate transmitters for each received signal*.

Bourgoin is directed to determining the impact of admitting a candidate user by a base station, taking into account the increases in the individual power levels of all users served by

the base station. *Bourgoin*, Abstract. Bourgoin describes performing the described process because “[m]aintaining the total power level received [at the base station] from all active users within certain limits is essential to achieving good network performance by limiting the level of interference.” *Id.*, at Col. 1, ll. 15-18. Bourgoin describes receiving at a base station, a connection request from a candidate transmitter. *Id.*, at Col. 3, ll. 30-31. The base station determines whether to admit the requesting mobile station by predicting the total power received by the base station if the candidate user were to become an active user. *Id.*, at Col. 3, ll. 32-35.

Therefore, Bourgoin expressly relates to a base station determining whether to admit or deny a mobile station request to become an active user within the base station. Bourgoin fails to teach or suggest “obtaining a plurality of received signals for a plurality of transmitters, wherein the plurality of received signals are received by a user terminal,” as claimed. Indeed, Bourgoin could not be modified to operate on signals received at a user terminal because a user terminal does not regulate which terminals are admitted to a base station. Modifying Bourgoin to operate at a user terminal or on signals received by a user terminal would render Bourgoin inoperable for its intended purpose.

Further, Bourgoin fails to teach or suggest “determining a list of a plurality of candidate transmitters for the received signal.” Bourgoin describes receiving a connection request from a candidate transmitter. *Bourgoin*, at Col. 3, ll. 30-31. Bourgoin fails to describe determining a list of a plurality of candidate transmitters, because in Bourgoin there is no ambiguity regarding the identity of the requesting candidate transmitter. The identity of the candidate transmitter in Bourgoin is the mobile station that sent the connection request. Nowhere does Bourgoin describe determining a list of a plurality of candidate transmitter for a single received signal from which the identity of a transmitter is determined.

Claim 1 also includes the feature of “identifying the transmitter for the received signal based on predicted powers for the candidate transmitters and measured power for the received signal.” The Examiner concedes that Bourgoin fails to teach or suggest this claimed feature. *See, Office Action*, dated October 29, 2007, at page 3. The Examiner contends that Dunn teaches this claimed feature. However, Dunn fails to cure the deficiencies in Bourgoin, and thus the combination of Dunn with Bourgoin fails to establish a *prima facie* case of obviousness.

Dunn describes wireless emergency location of mobile units. *See, Dunn*, Abstract. Dunn describes taking signal strength measurements of signals received at base stations. *See, id.* The signal strength measurements received at several base stations from a mobile unit user requiring assistance can be used to determine “a small area for which it would be practical to conduct a search.” *Id.*

Dunn, like Bourgoïn, fails to teach or suggest obtaining a plurality of received signals that are received by a *user terminal*. Instead, Dunn describes taking signal strength measurements at *base stations*. *See, id.*, at Col. 2, ll. 15-18. Similarly, Dunn, like Bourgoïn, fails to teach or suggest determining a list of a plurality of candidate transmitters for each of a plurality of received signals. Instead, Dunn describes base stations monitoring mobile unit transmissions for identity signals embedded within the mobile unit transmissions. *See, Dunn*, at Col. 2, ll. 44-47. Indeed, Dunn describes measuring the signal strength of the mobile unit ID signals. *Id.* Thus, the base stations described in Dunn do not determine a list of candidate transmitters, because each base station is able to receive the mobile unit ID, which identifies the transmitting mobile unit.

Thus, Dunn also fails to teach or suggest the claimed feature of “identifying the transmitter for the received signal based on predicted powers for the candidate transmitters and measured power for the received signal.” Instead, Dunn expressly describes utilizing the mobile unit ID embedded within the mobile unit transmissions to identify the transmitting mobile unit. *See, Dunn*, at Col. 2, ll. 44-47 and Col. 6, ll. 44-51.

Thus, the combination of Bourgoïn with Dunn fails to teach or suggest every claimed feature. Bourgoïn and Dunn both fail to teach operating on a plurality of received signals received at a user terminal. Further, both Bourgoïn and Dunn fail to teach or suggest determining a list of a plurality of candidate transmitters for each received signal. Finally, both Bourgoïn fail to teach or suggest “identifying the transmitter for the received signal based on predicted powers for the candidate transmitters and measured power for the received signal.” The Examiner concedes that Bourgoïn fails to teach the claimed feature and Dunn expressly describes identifying the transmitting mobile unit by its identity signals (ID).

Therefore, Bourgoïn and Dunn, whether alone or in combination, fail to teach or suggest the several of the same features from claim 1. Because the two references fail to teach or suggest the same claimed features, the combination of the two references also fails to

teach or suggest the features absent from each reference alone. Applicant respectfully requests reconsideration and allowance of claim 1.

Claim 13 recites a method for determining transmitters. The method includes “determining the transmitter for the received signal based on predicted powers for the candidate transmitters, the predicted power for the identified transmitter, measured power of the received signal, and measured power for the identified transmitter.” As discussed above in relation to claim 1, both Bourgoïn and Dunn fail to teach or suggest determining the transmitter based on predicted powers of a received signal and measured powers of the received signal. Both Bourgoïn and Dunn also fail to teach or suggest determining the transmitter based on measured power for an identified transmitter.

The Examiner concedes that Bourgoïn fails to teach or suggest the claimed features of “determining a list of candidate transmitters” and “determining the transmitter of the received signals” in the manner claimed. *See, Office Action*, at page 4. The Examiner contends that Dunn teaches determining transmitters. *See, id.*, at page 5.

However, as discussed above in relation to claim 1, it is clear that Dunn fails to teach identifying a transmitter using any predicted power. Instead, Dunn expressly describes determining the identity of a mobile unit based on the mobile unit ID embedded within the mobile unit transmissions. Thus, the combination of Dunn with Bourgoïn fails to cure the deficiencies of Bourgoïn alone. Applicant respectfully requests reconsideration and allowance of claim 13.

Claim 19 recites an apparatus that can identify transmitters in a wireless communication device. Claim 19 includes the feature of “means for identifying the transmitter for each received signal based on measured power for the received signal and predicted powers for the candidate transmitters in the list determined for the received signal.”

Claim 27 recites a computer program product for identifying transmitters. The computer program product includes “code for identifying the transmitter for each received signal based on measured power for the received signal and predicted powers for the candidate transmitters in the list determined for the received signal.”

As discussed above in relation to claim 1, neither Bourgoïn nor Dunn teaches or suggests any manner of identifying a transmitter based on measured powers of a received signal or predicted powers for candidate transmitters. Therefore, claims 19 and 27 are

believed to be allowable at least for the reasons discussed above in relation to claim 1.

Applicant respectfully requests reconsideration and allowance of claims 19 and 27

Discussion of Dependent Claims

Claims 2-12, 14-18, and 20-26 depend, either directly or indirectly, from one of claims 1, 13, and 19 and are believed to be allowable at least for the reason that they depend from an allowable base claim. Each of the dependent claims may have individual bases for patentability beyond those discussed above in relation to the independent claims. It is not necessary to discuss the patentable distinctions of each dependent claim because of the allowability of the base claims from which they depend. However, Applicant provides some illustrative examples.

Claim 10 features “the list of candidate transmitters for each received signal comprises a list of base station transceivers (BTSs) with same PN offset.” None of the cited references teaches or suggests a candidate list in which the candidate transmitters have the same PN offsets. The Examiner argues that Kennedy describes candidate transmitters as base stations. *Office action*, at page 10 (*citing Kennedy*, at Col. 4, ll. 54-57).

However, Kennedy fails to describe PN offsets of base stations and fails to teach or suggest any situation in which more than one base station has a same PN offset. The Examiner provides no citation to any portion of Kennedy that describes multiple base stations having the same PN offset.

Further, even if Kennedy were to include such a teaching or suggestion, there is no proper motivation that could result in modifying Bourgoïn to use such a teaching. Bourgoïn expressly describes a base station monitoring for connection requests from mobile stations and determining whether to admit a mobile station as an active user within the base station based on an expected total power. There is no teaching or suggestion within Bourgoïn that a base station has any capabilities to communicate directly with another base station. Indeed, in a wireless communication system a base station never admits another base station as an active user in its service area. Thus, it is unclear how any description of a base station transmission is applicable to the system of Bourgoïn. Therefore, Applicant respectfully requests reconsideration and allowance of claim 10 for this reason, independent of any other reasons.

Claim 11 features “obtaining predicted propagation delay for each candidate transmitter in the list.” Claim 11 further includes “wherein the transmitter for the received

signal is further identified based on predicted propagation delays for the candidate transmitters and measured propagation delay for the received signal.” This feature is not taught nor suggested by the cited references. The Examiner concedes that Bourgoïn and Dunn fail to teach the claimed feature. *See, Office Action*, at page 10. The Examiner argues that Kennedy teaches the claimed feature at Col. 4, ll. 27-31 and ll. 54-61. Applicant respectfully disagrees.

Applicant provides the cited portions of Kennedy below in their entirety. “Using the appropriate propagation loss model, the signal propagation characteristics for the signal paths between the possible locations of the mobile-appliance and the surrounding base stations can be estimated 210.” *Kennedy*, at Col. 4, ll. 27-31. “The received signal strength is estimated 230 for each of the base stations in the vicinity of the mobile-appliance for each of the spanning points in the coverage area based on the estimated propagation characteristics, the estimated mobile transmit power, and the base station capabilities.” *Kennedy*, at Col. 4, ll. 54-61.

Neither cited portion from Kennedy uses the term “predicted propagation delay.” Neither cited reference describes measuring a propagation delay from a transmitter. Even if the discussion of “propagation characteristics” in Kennedy is broadly interpreted to include propagation delay, there is no teaching nor suggestion to modify Bourgoïn and Dunn to include measured propagation delay or predicted propagation delay “wherein the transmitter for the received signal is further identified based on predicted propagation delays for the candidate transmitters and measured propagation delay for the received signal.” As discussed above in relation to claim 1, neither Bourgoïn nor Dunn describes identifying a transmitter from a candidate list. Indeed, Dunn expressly describes using a mobile unit ID that identifies a transmitting mobile unit. Thus, claim 11 is believed to be allowable because the cited references fail to teach or suggest every claimed feature and there is no motivation to combine the teachings in the manner suggested by the Examiner.

CONCLUSION

Applicant believes that all claims pending in the application are allowable. Applicant therefore respectfully requests that a timely Notice of Allowance be issued in this case.

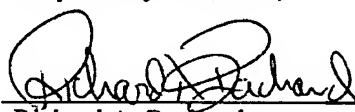
Applicant believes that the instant response is filed within the Shortened Statutory period for response provided in the Office Action of October 29, 2007.

If there are any other fees due in connection with the filing of the response, please charge the fees to our Deposit Account No. 17-0026. If a fee is required for an extension of time under 37 CFR 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned.

Respectfully submitted,

Dated: 28 January 2008

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